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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,008	08/09/2001	Heejune Ahn	K-0310	3596
34610	7590	02/12/2004	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			NGUYEN, JOSEPH D	
			ART UNIT	PAPER NUMBER
			2683	

DATE MAILED: 02/12/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,008

Applicant(s)

AHN, HEEJUNE

Examiner

Joseph D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/08/09/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Parkvall et al. (6,542,736).

Regarding claim 1, Parkvall et al. discloses a method of selecting a base transceiver system in a communication system (abstract, fig. 1, 5, col. 4 line 35 thru col. 5 line 12, col. 9 lines 37-51, and col. 11 line 43 thru col. 12 line 4) comprising the steps of:

a) at least one base transceiver system, providing to a mobile station load information that is a receiving probability of a signal (fig. 5-7, col. 8 line 43 thru col. 10 line 33);

b) the mobile station deciding a forward data transmission rate according to a channel state of the signal received from the base transceiver system (fig. 12, col. 11 line 50 thru col. 12 line 4);

c) the mobile station selecting a certain base transceiver system with which the mobile station will communicate using the provided load information and the decided forward data transmission rate (fig. 6-7, and 12, col. 8 line 43 thru col. 10 line 33, and col. 11 line 50 thru col. 12 line 4); and

d) the mobile station requesting the forward data transmission to the selected base transceiver system (fig. 6-7, and 12, col. 8 line 43 thru col. 10 line 33, and col. 11 line 50 thru col. 12 line 4).

Regarding claim 2, Parkvall et al. further discloses the method as claimed in claim 1, wherein at the load information providing step, the receiving probability is in reverse proportion to the number of mobile stations which the base transceiver system includes as its active set (current) (abstract, fig. 6-8, col. 8 line 55 thru col. 10 line 65).

Regarding claim 3, Parkvall et al. further discloses the method as claimed in claim 1, wherein the receiving probability is determined from a "value obtained by dividing a length of a slot that received data by a length of a slot that requests the data to the specified base transceiver system." (sector/rate) (abstract, fig. 3, 10, col. 10 line 66 thru col. 12 line 4).

Regarding claim 4, Parkvall et al. further discloses the method as claimed in claim 1, wherein the receiving probability becomes different according to a kind of service and priority of the data received from the base transceiver system (col. 6 lines 20-67).

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Regarding claim 5, Parkvall et al. further discloses the method as claimed in claim 1, wherein the load information is transmitted to the corresponding mobile station using a synchronous control channel, asynchronous control channel, or dedicated channel (fig. 4, col. 1 lines 36-53, and col. 7 line 28 thru col. 8 line 34).

Regarding claim 6, Parkvall et al. further discloses the method as claimed in claim 1, wherein the selection step of the base transceiver system includes the steps of:

a) multiplying the load information provided for each base transceiver system by the forward data transmission rate determined for each base transceiver system (col. 8 lines 35-64);

b) comparing values calculated for the respective base transceiver system with one another (fig. 6-7, 10-11, col. 4 line 35 thru col. 5 line 12); and

c) selecting the base transceiver system having the largest value according to a result of comparison (col. 2 line 63 thru col. 3 line 15, col. 4 line 55 thru col. 5 line 12, and col. 8 line 35 thru col. 11 line 67).

Regarding claim 7, Parkvall et al. further discloses the method as claimed in claim 1, wherein the respective base transceiver systems belong to the active sets activated by the mobile station (fig. 8, col. 10 lines 34-48).

Regarding claim 8, Parkvall et al. further discloses the method as claimed in claim 1, wherein at the requesting step, the mobile station requests the forward data

transmission to the base transceiver system through a data rate control (DRC) channel of a reverse link (fig. 4-12, col. 7 lines 28-43).

Regarding claim 9, Parkvall et al. further discloses the method as claimed in claim 8, wherein the data transmission rate information of a forward link to be transmitted from the base transceiver system (abstract, col. 6 line 37 thru col. 7 line 27), and the information on the base transceiver system selected by the mobile station are inserted into and transmitted through the DRC channel (fig. 4-12, col. 7 lines 28-43, col. 9 line 18 thru col. 10 line 33).

Regarding claim 10, Parkvall et al. further discloses the method as claimed in claim 1, further comprising the steps of: after the requesting step,

a) the base transceiver system receiving the DRC channel transmitted from the mobile station (fig. 4, 6-12, col. 7 lines 28-43);

b) the base transceiver system checking the mobile station that completes the DRC channel transmission until "(present slot time)-1-(present slot time mod (DRC channel length))" (fig. 4, 6-12, col. 7 lines 27-43);

c) the base transceiver system determining the data transmission scheduling for one among the checked mobile stations according to the received DRC channel information (col. 10 lines 4-33); and

d) performing the data transmission according to the data transmission rate requested by the corresponding mobile station according to the scheduling (col. 10 lines 4-33).

Regarding claim 11, Parkvall et al. discloses a method of selecting a base transceiver system in a communication system (abstract, fig. 1, 5, col. 4 line 35 thru col. 5 line 12, col. 9 lines 37-51, and col. 11 line 43 thru col. 12 line 4) comprising the steps of:

a) receiving probability information and channel state information through a forward link (fig. 3-4, col. 7 lines 27-43, col. 9 lines 18-35, and col. 10 lines 4-65);

b) estimating a forward data transmission rate corresponding to the channel state information (col. 2 line 63 thru col. 3 line 15, and col. 10 line 4-65);

c) selecting a corresponding base transceiver system in which the estimated forward data transmission rate and a value proportioned to the receiving probability in an active set become maximum (fig. 4-12, col. 2 line 63 thru col. 3 line 15, and col. 10 line 4-65); and

d) requesting a forward data transmission to the selected base transceiver system (fig. 4-12, col. 10 line 4-65).

Regarding claim 12, this claim is rejected for the same reason as set forth in claim 2.

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Regarding claim 13, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 14, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 15, this claim is rejected for the same reason as set forth in claim 5.

Regarding claim 16, Parkvall et al. further discloses the method as claimed in claim 11, wherein the receiving probability information is transmitted to corresponding mobile stations in case that the corresponding base transceiver system is included in an active set of a new mobile station (MT1 is old and MT2 is new) (fig. 5-12, col. 8 line 25 thru col. 10 lines 65).

Regarding claim 17, Parkvall et al. further discloses the method as claimed in claim 11, wherein the receiving probability information is transmitted to corresponding mobile stations in case that the active set is changed over a threshold value (col. 7 lines 1-15, and col. 8 line 65 thru col. 9 line 35).

Regarding claim 18, Parkvall et al. further discloses the method as claimed in claim 11, wherein the receiving probability information is periodically transmitted to corresponding mobile stations according to a timer, or non-periodically transmitted according to a request of the corresponding mobile station (col. 8 line 43 thru col. 10 line 3).

Regarding claim 19, Parkvall et al. further discloses the method as claimed in claim 11, wherein the mobile station is a mobile station that can perform data transmission/reception with at least two base transceiver systems (fig. 5, col. 8 lines 43-54).

Regarding claim 20, Parkvall et al. further discloses the method as claimed in claim 11, further comprising the steps of:

a) calculating (error performing) a bit error rate or packet error rate from the channel state information (fig. 4, col. 6 line 50 thru col. 7 line 43); and

b) determining the data transmission rate according to the calculated bit error rate or packet error rate (fig. 4, col. 6 line 50 thru col. 7 line 55, col. 11 lines 11-25).

3. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

703 308-9051, (for formal communication intended for entry)

Or:

(703) 305-9509 (for informal or draft communications, please label
"PROPOSED" OR "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington. VA. Sixth floor (Receptionist).

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D Nguyen whose telephone number is (703) 605-1301. The examiner can normally be reached on 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Joseph Nguyen



Feb. 3, 2004



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
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